Fell, step-daughter of George Fox; her accounts are cited as illustrating Quaker occupations and methods of her day. Scattered throughout the book are twenty or thirty brief biographies and scores of references to families and to individuals. The well-known names recur—Fry, Lloyd, Ransom, Tompion, Collinson, Fothergill, Lettsom, Barclay—to mention only a few. When he comes to the ironmasters and the mining companies Dr. Raistrick is full of technical information as he wends his way among bloomeries, furnaces, slitting-mills, marriages, partnerships and imprisonments, always having for background the concern of Friends that what is done in business shall accord with the testimonies and way of life of the society. The same orientation is evident in the work of the clockmakers and instrument makers, the botanists, scientists and doctors, and lastly of the bankers.

Though solid and well documented the book is not without variety. On one page, for instance, is an account of the care for poor apprentices, on another are notes on the coinage called " Quaker Shillings," and elsewhere " Daniel Quare's Paper setting forth his Refusal of a Pension of 300 per Annum to be the King's watchmaker Because for Conscience sake he could not Qualify himselfe as ye Law directs by taking ye Oath." The volume is indexed, clearly printed and delightfully illustrated.

What is there for us as geneticists? We may add to our knowledge of outstanding families. We may study the genealogical tables even if some of them do include the family industries so that the descendants of John and Mary appear to be a bevy of forges. Almost as if, to quote again, it had been the practice " to marry daughters to eligible small ironworks." Perhaps the most striking thing is the statement that numerically speaking the Quakers had " something like forty times their due proportion of Fellows of the Royal Society."

Raistrick emphasizes the effect of religious principles in the development of the Quaker folk, and points out that they and the scientists are alike in that they " share the insistence on the complete surrender to the guidance of truth." In his final chapter he has something to say on the influence of persecution on the one hand and of wealth and power on the other, which is pertinent to our own time.

I. W.

DELINQUENCY

British Journal of Delinquency, July and October 1950, Nos. 1 and 2. Published by the Institute for the Study and Treatment of Delinquency and Baillière, Tindall & Cox.

The Criminal Law and Sexual Offenders. A Report of the Joint Committee on Psychiatry and the Law appointed by the British Medical Association and the Magistrates' Association. London, 1949. B.M.A. Pp. 24. Price 3d.

IN this angry and complicated world—a world in which our technical achievements have completely outstripped our moral fibre—there is at least one sphere of endeavour in which we may take justifiable pride: the sphere of penal reform. How much wiser, kinder and more intelligent we are in our attitude to our delinquents than we were, say, a hundred or even fifty years ago, or, if it comes to that, since the passing of the Criminal Justice Act only three years ago. On the other hand, there are still very grave injustices, even in our own relatively civilized country. By far the worst of these, to my mind, is the handling of sexual offenders, and in particular the state of the law relating to homosexuality amongst adults.

In 1949 a joint committee, appointed by the Magistrates' Association and the British Medical Association, jointly published a report entitled *The Criminal Law and Sexual Offenders*. This committee declared—and very properly—that corruption or attempted corruption of minors, which is a highly reprehensible act, must always remain punishable, as, of course, must homosexual conduct in places frequented by the public.

But they went on to recommend " an early official inquiry into the advisability of the English law being brought into line with continental law in respect of the private conduct of consenting adults " ; and they also pointed out that English law differs from the law in most continental countries inasmuch as it does not recognize the consent of the other party as a defence to a criminal prosecution. The committee states, moreover, that the severe penalties to which homosexuals are liable favours opportunities for a most undesirable form of blackmail—and, they might have added, theft and even in some cases theft with violence.

But that is not the whole story. As a correspondent pointed out the other day in the *New Statesman and Nation*, the very strong and irrational feelings which homosexuality often arouses in those who deal with it in the courts " too often results in a harsh and vindictive sentence " ; and he went on to say that the difficulty of enforcing the law is in itself an argument against it since it is generally bad for society to have a law which can be so easily broken with impunity. Apart from the ineffectualness of the law as a preventive measure we may also well ask whether it is desirable to foist on our police force the invidious duties required of them in order to detect an offence of this kind committed in private.

Surely the whole crux of the matter is, however, this : subject to the safeguards mentioned above, homosexuality should not be treated as a crime but as a matter for society and its moral sanctions ; and the fact remains that in those countries where this is indeed the case there is no evidence that moral and social standards have in any way deteriorated.

The editorial board of the newly founded *British Journal of Delinquency* would, I think I am perfectly safe in assuming, be in sympathy with the general trend of these observations. Hermann Mannheim, one of the three members of the board, has himself written with wisdom on the subject of sexual reform in that admirable book *Criminal Justice and Social Reconstruction* ; and Dr. Edward Glover, another member of the board, draws attention in volume No. 2 to the wide variations in penal methods in different countries and to the need for a comparative study of them. " In view of modern efforts to establish enlightened policies on an international basis," he says, " it does seem important to examine these variations with some care. . . ." He adds that a comparison of penal methods would also offer " an interesting approach to the investigation of differential racial characteristics." As an example of these variations he cites Denmark, in which a group of sexual offenders, including a number of exhibitionists, were recently punished by castration. His comments on this procedure are acid.

At least half a dozen articles in these first two issues of the *Journal* are fascinating reading, even for a layman like myself. There is, for instance, a paper on capital executions in the United States in which, according to the statistics, no fewer than 294 people were between 1930 and 1947 executed for rape. Although there is no evidence that rape is on the increase in the U.S.A., there has been during this period, none the less, an increase in the number of executions for this crime. " In view of the concentration of executions in the Southern states," comments the author, Thorsten Sellin, Professor of Sociology at Pennsylvania University, " we may assume that the expanded use of the death penalty is a reflection of race conflicts rather than an indication of changes in the real rate of sex crimes." He adds : " There is no evidence from statistics that it is a deterrent or serves any utilitarian end that cannot be reached better by other methods of dealing with the offender. An examination of American data shows little evidence, however, of any disposition in the United States to abandon this archaic form of punishment so inconsistent with modern penological thinking." This indeed is tragic reading.

The subject-matter of these papers is extraordinarily varied. At one moment one is reading about mass theft—that is to say, petty stealing committed by so-called " honest " people and in particular large-scale pilfering from employers ; at the next about an experiment to deal with the

solitary adolescent who tends to grow bored with the ordinary activities of youth clubs. In this case the problem was partly solved by a novel form of club—a converted sailing barge moored at Wapping on the Thames. I also enjoyed a paper on the fate of the " brothel girls " in Paris since the closing of those institutions in 1946 ; it gives a vivid though not particularly pleasant picture of the night life of that effervescent capital.

How unfortunate it is that delinquency research does not make the same appeal to our hearts as, say, cancer or tuberculosis research. The public tighten their purse-strings as soon as they are called upon to help in the fight against delinquency, no doubt partly because they do not realize its social importance and partly because it fails to command their sympathies. The result is that this vital branch of research is being seriously hampered. All the more reason that we should give the greatest possible support to this *Journal.* If it maintains the standard of these first two numbers it will deserve a very wide public indeed.

RICHARD RUMBOLD.

EVOLUTION

Carter, G. S. *Animal Evolution : A Study of Recent Views of its Causes.* London, 1951. Sidgwick & Jackson. Pp. 368. Price 30s.

FOR a variety of reasons Darwin's theory of evolution by natural selection suffered a temporary eclipse at the beginning of the present century. During the last thirty years or so, however, there has been a renewed and increasing attack upon the problems of evolution, based upon the expanding knowledge of genetic processes and upon the science of ecology, with the result that many biologists of the present day have accepted a modified form of Darwinism. *Animal Evolution* is intended to provide a summary of the newer knowledge of the evolutionary process for the student and general zoologist. The first half of the book is devoted to " the basis of biological fact," and includes a brief statement of palæontological and genetic principles, together with a discussion on species definition and natural selection. In the remaining pages the author discusses the theoretical aspects of evolution.

One of the fundamental features of the new approach to evolution is the account taken of the whole natural history of animals instead of the older morphological approach. Of the older definitions of species it may justifiably be said that they were framed by systematists largely upon anatomical data which could obtained within the confines of the laboratory. The newer ecological approach has, however, shown that animals in nature are organised into groups which correspond closely with the species defined by the morphologist. Within such a biological species there are interbreeding communities or " demes " which constitute a fundamental evolutionary unit, fundamental for the reason that evolution (in sexually reproducing organisms) can occur only by changes within the interbreeding population as a whole.

In the light of the newer concepts of genetic principles it is now possible to understand how the minute but cumulative changes characteristic of micro-evolution have occurred. Whilst it is true that every mutation of a gene must be abrupt, the expression of that change in the organism is susceptible to modification by gene position within the chromosome and the activity of other genes. By virtue of such modifying factors the expressiveness of a mutation may undergo gradual and progressive change.

The differentiation occurring in adaptive radiation (macro-evolution) and the appearance of new types of animal organization (mega-evolution) can only be studied in the light of the fossil record, which is all too often fragmentary. Nevertheless it appears that the changes involved are in many instances not essentially different from those seen in micro-evolution, for many are in reality only quantitative or qualitative modifications of an established pattern. It must be confessed, however, that in regard to the fundamental changes leading to the appearance of new patterns we are at present largely ignorant.

In such an expanding field of knowledge it